Adenosine Cyclic Ketal (ACK)

when 
$$R_1 = R_2 = \begin{pmatrix} H_2 & H_2 \\ C & C \\ H_2 & H_2 \end{pmatrix}$$

and  $R_3$ ,  $R_4$  and  $R_5$  = hydrogen

and 
$$R_6 =$$
 $C$ 
 $H_2$ 
OH

Figure 1A. Chemical structure of adenosine cyclic ketal (ACK) and the chemical formula of the compound nonamethonium adenosine cyclic ketal (nonamethonium ACK).

$$CI$$
 $i, ii$ 
 $i, ii$ 
 $iii$ 
 $ii$ 
 $iii$ 
 $ii$ 

Figure 1B: The synthetic scheme for synthesizing nonamethonium adenosine cyclic ketal. The reagents and conditions are: i) zinc dust, tetrahydrofuran (THF); ii) N-methylpyrrolodine, CoBr<sub>2</sub>, carbon monoxide; iii) adenosine, HCl/dioxane, (EtO)<sub>3</sub>CH, DMF; iv) 40% Me<sub>3</sub>N in H<sub>2</sub>O.

Fig. 2A

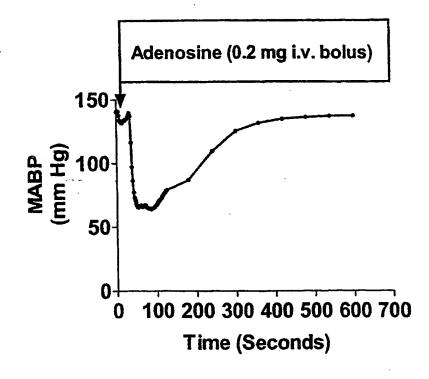


Fig. 2B

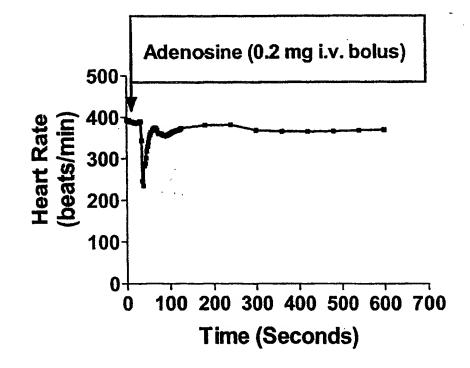


Fig. 3A

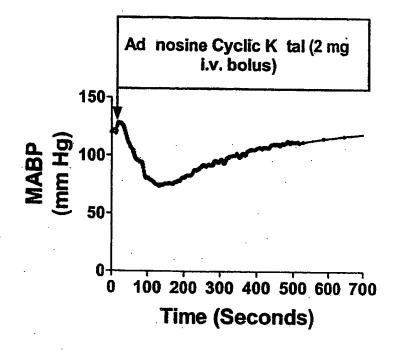


Fig. 3B

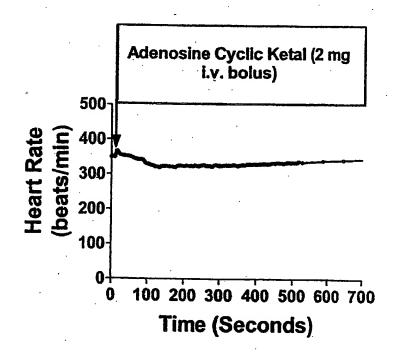


Fig. 4A

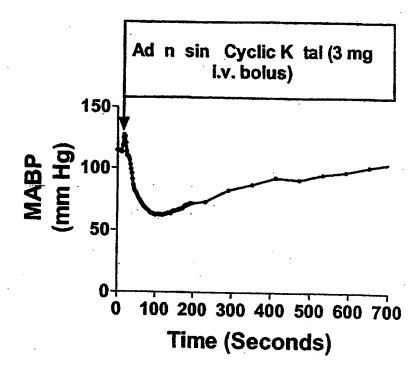
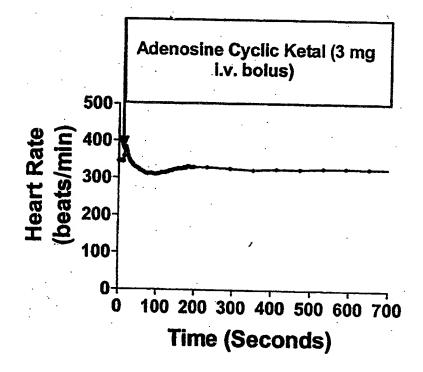
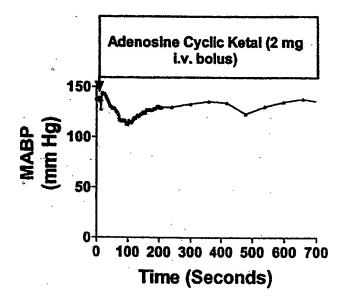


Fig. 4B



## Pretreated with DPSPX (10 mg i.v. bolus + 0.15 mg/min)

Fig. 5A



## Pretreated with DPSPX (10 mg i.v. bolus + 0.15 mg/min)

Fig. 5B

